

First Aero Weekly in the World

Founder and Editor: STANLEY SPOONER

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport

OFFICIAL ORGAN OF THE ROYAL AERO CLUB OF THE UNITED KINGDOM

No. 829. (No. 46, Vol. XVI.)

NOVEMBER 13, 1924

[Weekly, Price 6d.
Post free, 7d.]

Flight

The Aircraft Engineer and Airships

Editorial Offices: 36, GREAT QUEEN STREET, KINGSWAY, W.C. 2.

Telegrams: Truditur, Westcent, London. Telephone: Gerrard 1828

Annual Subscription Rates, Post Free:

United Kingdom .. 30s. 4d. Abroad .. 33s. 0d.*

These rates are subject to any alteration found necessary under abnormal conditions and to increases in postage rates

* European subscriptions must be remitted in British currency

CONTENTS

	PAGE
Editorial Comment	
Airships	715
Air Racing in Czechoslovakia	717
Sir Samuel Hoare's Guildhall Speech	718
Col. Brinsmead's Flight Round Australia	719
Light 'Plane and Glider Notes	720
The Driggs-Johnson Light Monoplane	721
The "Holland" Light 'Planes	722
Personals	724
Royal Air Force	725
R.A.F. Intelligence	725
Air Post Stamps	726

DIARY OF FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in the following list:

1924

Nov. 13 Professor L. Bairstow, C.B.E., F.R.S., F.R.Ae.S. (Zaharoff Professor of Aeronautics, University of London): "Skin Friction," before R.Ae.S.

Nov. 19 Mr. C. G. Grey (Editor, *The Aeroplane*): "Aircraft in the Next War," before Cambridge Univ. A.e.S.

Nov. 21 Dr. A. P. Thurston, M.B.E., F.R.Ae.S., M.I.A.E., Hons. Member: "Graphic Methods of Aircraft Structural Design," before I.Ae.E.

Nov. 26 Lt.-Comdr. S. E. Deacon, R.N.: "The Air Port of Croydon," before Cambridge Univ. A.e.S.

Nov. 27 Dr. G. C. Simpson, C.B.E., F.R.S. (Director, Meteorological Office): "Thunderstorms," before R.Ae.S.

Dec. 4 Colonel F. Searle, C.B.E., D.S.O. (Managing Director, Imperial Airways, Ltd.): "The Maintenance of Commercial Aircraft," before R.Ae.S.

Dec. 5-21 Paris Aero Show.

Dec. 12 Commander J. C. Hunsaker (C.C.), U.S.N., Assistant Naval Attaché to the American Embassy, London: "Notes on Seaplane Design," before I.Ae.E.



HE announcement made recently by Sir Trevor Dawson, Vice-Chairman of Vickers, Ltd., and Chairman of the Airship Guarantee Co., is the first official intimation that an actual start has been made under the scheme adopted by the late Government for the resumption of airship work in Great Britain. The early history of airships in this country will be well known to readers of FLIGHT,

and it will suffice to recall briefly that after the War there followed a period of vacillation in official circles between enthusiasm and apathy on the question of airships. The flight of R.34 to America and back was the outcome of the former, but the terrible calamity which overtook the R.38 over the Humber, coupled with a general demand for economy everywhere, resulted in the abandonment of airships altogether. It will still be recollected how from various sources an endeavour was made to save the existing airships, among their most ardent supporters being Mr. Ashbolt, Agent-General for Tasmania, who advocated airship services to Australia. However, nothing came of the different suggestions, the Air Ministry, never wildly enthusiastic in airship matters, appeared to lose interest, and the net result was that the airship personnel, what little was left after the R.38 catastrophe, was dispersed and the airships were allowed to "rot in their sheds."

Then suddenly the Admiralty discovered that it could do with a few airships, although having previously taken no noticeable interest in them, and from being the Cinderella of aircraft, airships came once more into the limelight. Among those who fought valiantly and consistently for the resumption of airship work was Commander Dennis Burney, who put forward one scheme after another, only to have them turned down on various grounds. By persisting, however, he at last succeeded in getting the matter reconsidered, although in a somewhat modified form, and, under the late Labour Government, a scheme was sanctioned whereby Commander Burney's company, the Airship Guarantee Co., was given the option of building one ship while a second was to be

constructed at Cardington, Bedford, a Government airship station.

Sir Trevor Dawson's statement refers, as already stated, to the contract secured by the Airship Guarantee Co., an associated company of Vickers, Ltd., and the airship to be constructed by that firm is to have a capacity of 5 million cubic feet, or approximately twice the size of any airship hitherto constructed in any country. We have on many occasions called attention to the difficulties which one must expect to encounter in the design and construction of an airship of such size, but as the Government is now pledged to carry out actual flying trials with one of our older airships, to be re-conditioned and modified by the spring of next year, as well as further model research at Teddington, it may be that sufficient will be learnt between now and the time of completion of the first 5-million cub. ft. ship, to make the construction less of an experiment. Simultaneously with the construction of the private airship, the building of a Government airship at Cardington, also of 5 million cub. ft. capacity, is to be undertaken. We have frequently criticised this duplication of work, quite apart from the extra expense which a Government-built airship will entail. (It is well known that ships built in Government dockyards are always a good deal more costly than those built in private yards.) And we do strongly protest against the principle whereby a Government establishment works in direct competition with the industry. However, that is the decision come to by the late Government, and it is probably unlikely that Mr. Baldwin's Government will materially alter it.

As regards the airship to be built by the Airship Guarantee Company, this is to be suitable for commercial work, and its design will, therefore, be based upon the carrying of passengers. It is reported that the new airship (which, by the way, must be finished and delivered to the Air Ministry by September, 1927) will have accommodation for 120 passengers and a crew of 40, while there will still remain a disposable lift of some 10 tons for freight and/or mails. Leaving out, for the moment, the problems of structural design, the project is indeed a fascinating one, and it is scarcely to be wondered at that the daily press has rather "gone off the deep end" about it, with references to lounges "large enough to dance in," smoking-saloon, etc. Nevertheless, when one comes down to rock bottom there appears to be a good margin of safety left in the matter of structural design.

For instance, it is stipulated that the weight of structure and engines must not exceed 90 tons. On the assumption that hydrogen of a purity commercially obtainable will lift 65 lbs. per 1,000 cub. ft., the 5,000,000 cub. ft. airship should have a gross lift of 325,000 lbs., or 145 tons. Experience with smaller rigid airships appears to indicate, as stated by Commander Boothby in his lecture recently before the Institution of Aeronautical Engineers, that ample strength can be obtained when half the total displacement is devoted to the hull and engines. Taking this figure as a basis, sufficient strength should be provided if the hull and engines of the 5,000,000 cub. ft. ship weigh $72\frac{1}{2}$ tons. By allowing as much as 90 tons for these items more than ample strength should be provided, more especially as it is generally thought that the structure weight in a rigid airship does not,

for constant strength, go up in quite the same ratio as the size. There is thus good cause to believe that, provided the Government fulfils its promise to carry out extensive airship research while the two large airships are in early stages of construction, and while, consequently, certain changes in structural design can be made without too great loss in time and money, a 5,000,000 cub. ft. airship can be built without introducing too many experimental features. The whole question is largely one of performance. Some of the older British airships were, it is generally admitted, rather stronger than they need have been, and thus safety was attained at the cost of performance.

The accident to R.38 was mainly due to the fact that that airship was designed to have a very high ceiling, consequently the structure weight had been kept down to a minimum. It is true that in commercial airships the question of weight will always be an important one, as the amount of paying load, or, in other words, the commercial value, is intimately connected with the question of structure weight. But if large factors of safety are insisted upon rather than exceptional pay loads, adequate structural strength should be attainable.

From certain dimensions of the Vickers airship which have been published, it would appear that the length to diameter ratio is rather smaller than in some of the older ships. This, if correct, is in conformity with recent German practice, and has been found to give stronger construction without marked increase in head resistance. Thus it seems fairly obvious that if we have had no opportunity of recent years to carry out actual airship design, our few remaining airship experts have kept fully informed of the progress made elsewhere, and are determined to benefit by it to the fullest extent. The length of the new airship is given as 695 ft. and the greatest diameter as 132 ft., giving a length/diameter ratio of a little over five, which is quite low compared with some airships that have been built.

As regards power plants, it has been stated that the Vickers airship is to be fitted with engines burning a mixture of kerosene and hydrogen. This, if correct, should go a long way towards security from fire, one of the most terrible dangers present in airship travel. It is generally believed by those with experience of airship work that the greatest risk is provided, not by the hydrogen, which passes away relatively rapidly, but by the petrol fumes, which seem to hang about an airship for long periods. It should be remembered that the fuel tanks are stored inside the hull, and that, therefore, petrol fumes are almost bound to be present always.

The substitution of kerosene should avoid much of the risk, quite apart from the fact that using up surplus hydrogen in the engines instead of valving it to waste should result in very considerable economies. There is also the use of heavy-oil engines, which offers advantages of its own. It is now well known that Wm. Beardmore and Co. have attained a very considerable degree of success with their heavy-oil engine, and, although the adoption of this type for heavier-than-air craft may be some little distance out in the future yet, there seems to be good reason to believe that its application to airship work is considerably simpler, and we hope the possibilities which this type of engine offers will not be overlooked in planning the new airships.

AIR-RACING IN CZECHOSLOVAKIA

THE Prague Aviation Meeting, which was held during September last, had drawn an entries list of no less than 30 machines, which is exceptionally good if one remembers that machines had to be of Czechoslovak origin. Out of the 30 machines entered, 25 started in the various races. In order to give the slower machines a chance the competitions were divided into four categories. Class A was for machines with a useful load of 500 kg.; Class B for sports machines up to 300 kg., empty weight; and Class C for machines with a useful load of 250 kg. Finally there was the race for the trophy presented by the President of the Republic. This is a challenge trophy which becomes the property of the winner in three successive years, or the winner five times in all. This was a pure speed race without restrictions as to useful load.

As an instance of the enthusiasm of the Czechoslovak people, it may be mentioned that more than 30,000 spectators witnessed the races from the Kbely aerodrome, apart from the thousands who saw the races from points along the course. The course for the various races was a triangular one of 100 km. (62 miles), with start and finish at Prague aerodrome and with turning points at Nove Benatek and Rip. The course

although he had to make a forced landing owing to petrol pipe trouble, managed to gain first place. Dr. Lhota's time for the 200 km. was 1 hour 17 mins. 21.6 secs., an average speed of 155.1 km./h. (97 m.p.h.). Dr. Lhota was flying an Avia B.H. 10 low-wing monoplane, and the engine, as already stated, was the Walter 60 h.p. radial air-cooled.

The racing finished up during the afternoon with the pure speed race for the President's trophy. Although six machines took part in this race, it was obvious that it had resolved itself into a fight between the Aero A.18B, with 300 Walter engine, and the Smolik S.8, with Napier "Lion." The Aero A.18B is the well-known A.18 with smaller wings. In the race the A.18B had had its wings reduced to a minimum of 9.6 sq. m. (103 sq. ft.), and it carried a wing loading of 90 kg./sq. m. (about 18 lbs./sq. ft.). The Aero A.18B is, as will be seen from our photograph, a fairly normal biplane. The Smolik S.8, on the other hand, is a monoplane with single-strut bracing, somewhat similar to the French Nieuport-Delage "Sesquiplans." It also had a very high wing loading, i.e., 74.8 kg./sq. m. (about 15 lbs./sq. ft.). The A.18B, which was piloted by J. Novak, covered the first lap in 23



WINNER OF THE PRESIDENT'S TROPHY: The Aero 18B is fitted with a 300 h.p. Walter engine. In the race it attained an average speed of 164.5 m.p.h.

had to be covered twice, giving a total distance of 200 km. (124 miles).

In Class A (machines with useful load of 500 kg.) Kaspar on an Aero A.12 with 260 h.p. Maybach engine secured first place, his time for the 200 km. being 1 hour 3 mins. 19.4 secs. corresponding to a speed of 189.05 km./h. (118 m.p.h.). Lieut. Skrejsovsky on a similar machine was second, with a time of 1 hour 4 mins. 26.4 secs. (186.219 km./h.). Third place was gained by Dovolil on a Smolik S.6, also with Maybach engine. His speed was 157.5 km./h.

In Class C (250 kg. useful load) but four machines started, and one of these, the Smolik S.2, piloted by Nemec, had to retire. The remaining three, all A.12's, completed the 200 km. circuit, the winner being Lehky, whose time for the course was 59 mins. 17 secs., corresponding to an average speed of 202.9 km./h. (126.2 m.p.h.). The speeds of the other two competitors were 196 and 183.6 km./h. respectively.

In Class B, for sporting machines weighing not more than 300 kgs., empty, eight machines started, and seven finished. All eight were of the well-known "Avia" type described in *FLIGHT* at the time of the Prague Aero Show, and all were fitted with the 60 h.p. Walter engine. There were five B.H. 10 machines, one B.H. 9, one B.H. 11, and one B.H. 17. It will be recollected that the "Avia" machines are named after the Milos Bondy a Spol designers Benes and Hajn. The winner in Class B was the well-known Dr. Lhota, who,

mins., giving a speed of 260.755 km./h. (156.2 m.p.h.), and the second lap in 22 mins. 32.6 secs. (266.153 km./h.). His average speed over the two laps worked out at 263.427 km./h. (164.5 m.p.h.). The S.8, piloted by Jezek, took but 22 mins. 8 secs. to cover the first lap, his speed being 271 km./h. (169.2 m.p.h.), but his second lap took 23 mins. 26.4 secs., so that his total time for the two laps was 45 mins. 34.8 secs., giving an average speed of 263.273 km./h. (164 m.p.h.). To illustrate how close the race was it may be pointed out that there was only about one second's difference in the total times of the two competitors. At the moment no information is available concerning the reason for the longer time taken by Jezek on his second lap. The speed at which he covered the first lap seemed to prove the S.8 definitely the faster machine, as, of course, it should have been with the higher-powered engine.

It is of interest to place on record the fact that a French Dewoitine, with 300 h.p. Hispano-Suiza engine, flew in the speed race *hors de concours*, and completed the 200 km. in 1 hour 1 min. 36 secs., corresponding to an average speed of 206.215 km./h. (129 m.p.h.). The Dewoitine was of the D-1, C-1 type, i.e. a single-seater fighter monoplane, of which Czechoslovakia has obtained several examples.

The meeting was a great success, and bearing in mind the restrictions as to the engines and machines used being home products, reflects great credit on Czechoslovakian aviation.



Earl of Kinnoull Learns to Fly

THE EARL OF KINNOULL, who has purchased a D.H. machine for journeying between his country seat at Perth and London, and also for touring on the Continent, is learning to fly at the de Havilland School of Flying, Stag Lane, Edgware.

The Earl's machine is being fitted with dual control in order that the Countess of Kinnoull, who will accompany her husband on his flights, may learn to fly the machine, and so take over the control occasionally during long flights.

SIR SAMUEL HOARE'S GUILDHALL SPEECH

SIR SAMUEL HOARE, Secretary of State for Air under the new Government, in responding for the Royal Air Force on the occasion of the Lord Mayor's Banquet at the Guildhall, November 10, delivered the following speech:—

"Although I am responding for the smallest and the youngest of the three fighting services, I can claim a distinction that is possessed by neither of my colleagues who have just spoken, nor, indeed, by the Prime Minister himself. For, amidst the changes and chances of this political life, I have had the privilege of replying for the same Department at three consecutive Guildhall banquets. May this exception of departmental longevity now become the rule under the more stable conditions that we hope to enjoy.

"Upon this occasion two years ago I ventured to tell the citizens of London that, whilst the Royal Air Force was in efficiency and moral second to none, it had been reduced so low in strength as to leave no squadrons available for the defence of these shores against air attack. Last year I was in the happier position of being able to announce that this vital gap in our defence was to be filled and that a force of 52 Home Defence Squadrons was gradually to be created. This year I am still more happy to say that, thanks to the foundations that we laid eighteen months ago and thanks also to the continuity of policy adopted by my distinguished successor, Lord Thomson, substantial progress has already been made, and by the end of the financial year 18 of these squadrons should be formed.

"Over and above these regular squadrons, I also hope that certain auxiliary and special reserve squadrons will be created in the near future. So far as London's concerned, the Territorial Associations of the City and the County have taken a keen interest in the proposal to form certain of these squadrons in London. I have always wished that the first auxiliary Air Force squadrons to be formed anywhere in the world should be formed in the capital of the Empire, and that the City should be able to count amongst its trained bands a City Defence Force in the air.

"In the meanwhile, the citizens of London, always keenly interested in defence questions, can rest assured that the air defence of these shores is substantially better than it was twelve months ago, and that in twelve months' time it will be better still. If air defence is the most urgent question connected with British air power, the second is, in my view, the question of Imperial air communication. I do not believe that it is possible to exaggerate the importance of the question of quicker intercourse between London and the other capitals of the Empire. Many of our difficulties and misunderstandings

are due to the slow methods of communication and to the impossibility of quickly exchanging views by word of mouth. It is here that the development of the Empire air communications will prove so useful. If we can reduce the time of the journey, between London and Bombay, for instance, by ten days, and between London and Melbourne by twenty days, and there is no technical reason why with airships we should not be able to make this reduction, the benefit that the Empire will receive cannot be overestimated. From the point of view of defence, better air communication will help us to solve economically many difficulties and urgent questions in the Near East, and I should like now to pay a tribute to the excellence of the work carried out by the Royal Air Force in very difficult circumstances in Iraq. From the point of view of trade and industry the saving of time will mean the saving of money and closer and more constant connection with our Empire markets. From the point of view of Imperial policy, it will make more possible continuous intercourse between the ministers of this country and the ministers of the great Dominions.

"These are not fantastic visions. Already the foundations have been laid. We have shown that it is possible to run punctual and regular air services between London and certain of the capitals of Europe, and I am glad to note that the London to the Continent services have carried in the last six months twice as much freight as they have ever carried before. We have shown that it is possible for ministers to travel by air with amazing rapidity and regularity. For whilst I flew more than 1,000 miles on official business in Europe, my successor has flown 2,600 miles in the Near East in a single week. We now intend to show with the experiments that we are making in the development of airships that in a few years' time it will be possible to have as dependable a service between London and Bombay by airship in 100 hours as there is now by aeroplane between London and Paris.

We have shown by the progress that has been made during the last ten years in aviation that, with anything like the same progress in the next ten years, these things are not only possible but certain.

"As for myself, I shall feel that I have deserved in some small measure the honour that you have shown me in connecting my name with this toast, if at the end of my term of office I shall have done something more to bring London into closer and quicker connection with the Dominions and India, and by this means to strengthen the political and industrial foundations of the British Empire, alike the most stable and the most peaceful power in the world."

LORD THOMSON AND THE AIR FORCE

IN a farewell message to the staff of the Air Ministry, Lord Thomson, Secretary of State for Air in the late Government, said:—

"My term of office at the Air Ministry, brief as it has been, has confirmed my belief in the almost unlimited potentialities of aviation, both in peace and in war. The achievements of the Royal Air Force during its short existence have already established a great tradition, and are a source of legitimate pride to the British people. To the creators of that force our country owes a debt of gratitude; it remains for those who follow them to carry on their work with unflagging zeal.

"That this will be so I feel confident. It has been my good fortune to visit many air stations—at home, in Iraq, Egypt, Palestine, and Transjordan; everywhere I have found keenness, intelligence, devotion to duty, and an admir-

able organisation. The credit for this is largely due to the wisdom and experience of the staff at the Air Ministry; but the material they have had to handle is magnificent, and the future of the Royal Air Force is assured if a high standard of conduct and efficiency is maintained.

"Civil aviation progresses surely from its necessarily small beginnings. If the experiments recently initiated bear fruit, and the airship is added to the aeroplane as a means of communication, offering at once speed, safety, and wide freedom of movement over land and sea, it is difficult to set bounds to the developments of air transport in the coming years. In conclusion, I desire to express my heart-felt gratitude for the loyal services of all those who worked with me both at the Ministry and outside it while I was Secretary of State for Air."

The New British Airships

WORK is now about to commence on the two 5,000,000 cubic ft. rigid airships—the outcome of the "Burney Airship Scheme," which was "under consideration" for such a long time. The Civilian vessel of the Airship Guarantee Co., an associated company of Vickers, Ltd., is being laid down at Howden, while the Service vessel, for which the Air Ministry is responsible, is being built at Cardington.

British Seaplane Wrecked

AN exciting seaplane accident, which might have ended more seriously than it did, occurred at Portland Harbour, on November 9. Two seaplanes, one carrying Rear-Admiral W. S. Nicholson, started from Portland for Portsmouth, when the other machine, piloted by Wing-Commander Bone,

struck the mast of a coal barge on rising from the water. This smashed one of the wings and the machine dived into the sea and turned turtle. The pilot and the other occupants—who were Squad-Ldr. Kellaway, Sergt. Sarmer and Corp. Hall—were strapped in their seats, and were thus trapped in a somewhat precarious position under water. Fortunately, assistance was immediately at hand, and all were released without loss of life—although Sergt. Sarmer was unconscious. The machine was wrecked, but was salvaged later.

U.S. Air Mail 'Planes Destroyed

OWING to the fusing of an electric lamp one of the aeroplane sheds of the U.S. Air Mail Service at Cheyenne was set on fire on November 8 and seven aeroplanes were destroyed.

COL. BRINSMEAD'S FLIGHT ROUND AUSTRALIA

ALTHOUGH we have already given, in previous issues of *FLIGHT*, particulars of Col. Brinsmead's flight round Australia last summer, the following letter, which the de Havilland Aircraft Company have received from Col. Brinsmead, the Controller of Civil Aviation for Australia, giving further details of this great flight may be of interest. The letter runs as follows:—

"DEAR SIR,—I have no doubt that you will be greatly interested to receive some details regarding the Round-Australia Flight, which was successfully completed recently on the D.H. 50 machine supplied by you. The objects of the trip, which involved the flying of some 8,000 miles, of which a considerable proportion had never been flown previously, were to demonstrate the '50' to companies operating regular services within the Commonwealth and, incidentally, to examine potential air routes and proposed extensions to existing services.

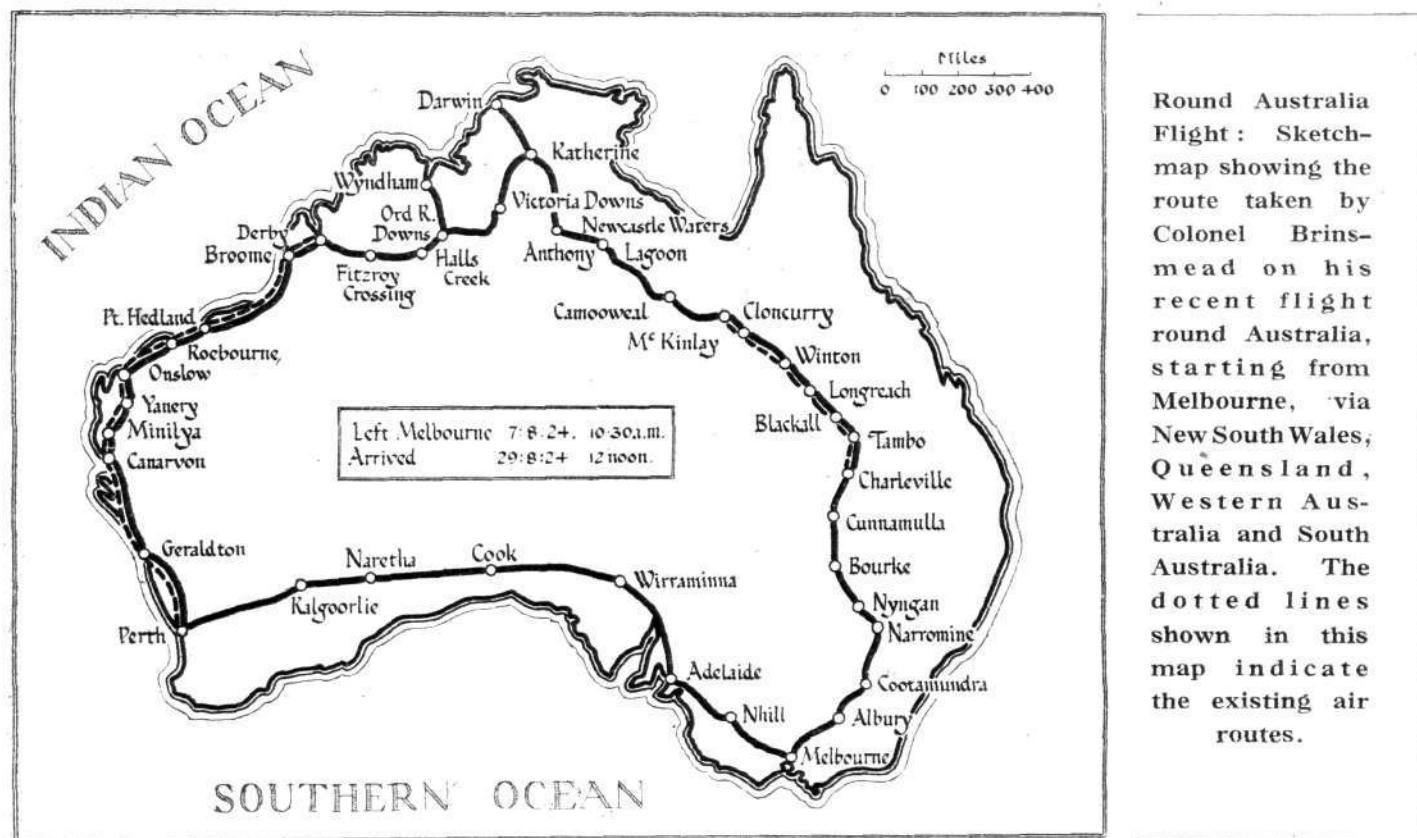
"The journey was commenced from Melbourne on August 7—two days after the erection of the machine was completed and after the machine had been flown but 2 hours 15 mins. in

course, due to the relatively high temperatures encountered in the tropics. (The engine was a Siddeley "Puma.")

"The whole of the credit for keeping the engine in such a condition as to enable the machine to carry out an average of four hours' flying for twenty-three consecutive days over a route where facilities for overhauls and adjustments were practically non-existent was due to Aircraft Inspector R. H. Buchanan, who accompanied the party as mechanic.

"It is pleasing to note the large amount of attention that has been paid to those small details of design that make for perfection. I refer particularly to the degree of comfort, both from the passengers' and pilot's points of view, that has been made a feature of this machine, and I have no hesitation in saying that the '50' is the nicest machine I have ever journeyed in and—if I may be permitted to say so—that it is a credit to the designer and to the de Havilland Aircraft Company's staff.

"The machine has been carefully overhauled since return to Melbourne, and is found to be in such condition throughout



tests. It was originally proposed to carry out at least 10 hours' flying on the machine before taking it on its long journey, but after the initial test trip it was realised that to do so would be quite unnecessary. Throughout the journey, which occupied twenty-two days and two hours, the machine behaved exceptionally well, and was always more than equal to the task ahead of it each day. It was in the air for twenty-five consecutive days, including test flights, and we were able to complete the journey in five days less than we had originally estimated as the minimum period for completion.

"The machine was loaded almost up to the total load allowed by the Certificate of Airworthiness, and its performance throughout was all that could be desired. The only spare parts used during the journey were three inner inlet valve springs and two sparking plugs, and no adjustments or repairs whatever were made to the machine apart from the tightening up of wing bracing, the slackness in which was, of

that I should, if necessary, have no hesitation in setting out immediately on a repetition of the circuit.

"I think you will agree with me that even granting the excellence of the machine and engine, such a satisfactory performance could not have been attained by other than a really first-class pilot. The pilot (Capt. E. J. Jones, M.C., D.F.C., Superintendent of Flying Operations in my Branch) not only flew about ninety hours in three weeks, but landed on some forty occasions on aerodromes, many of which had been prepared by enthusiastic station-owners in the Northern Territory and Kimberleys who had never previously seen an aeroplane, and the surface and approaches of which bore but faint resemblance to that of, say, Croydon.—

Faithfully yours,

(Sgd.) H. C. BRINSMEAD,
Controller of Civil Aviation."

An official sketch-map showing the route taken on this flight is reproduced herewith.

D'Oisy Honoured in Belgium

Capt. Pelletier d'Oisy and Sergt. Bezin, the heroes of the Paris-Tokio flight, were decorated by the King of Belgium

at Brussels, on November 8. They later attended a reception given in their honour by the Aero Club of Belgium, at which the King was also present.

LIGHT 'PLANE AND GLIDER NOTES

NEGOTIATIONS between the Air Ministry and representatives of six Light Aeroplane Clubs are, we understand, proceeding satisfactorily, although the question of engine power has not yet been settled. A meeting will take place tomorrow (Friday, November 14) at the Air Ministry, at which will be present the A.M. officials concerned and representatives of the six clubs. It is understood that definite proposals will then be made by the clubs, and that the Air Ministry will give these every consideration.

* * *

It may be recollected that originally the Air Ministry announced its willingness to enter into an agreement with not more than 10 clubs. The six clubs to be represented at tomorrow's conference are as follows: The Royal Aero Club (entrusted with the formation of a light 'plane club for the London district), the Midland Aero Club (who have similarly undertaken the arrangements of a Midland Light 'Plane Club for Birmingham and district), the Newcastle-on-Tyne Light Aeroplane Club, the Lancashire Light Aeroplane Club, the Glasgow Light Aeroplane Club, and the Yorkshire Light Aeroplane Club.

* * *

THE Air Ministry's offer is that of an initial grant of £2,000 to each club, for the purchase of machines, etc., and an

It is thus with considerable satisfaction that we are able to record that the meeting is taking place tomorrow, and we trust it will result in real progress being made.

* * *

VISITORS to the Lympne light 'plane meeting in September and October will remember that on the day of the Grosvenor Cup race a small biplane arrived and, after doing a few graceful stunts, came to rest close to the railings surrounding the public enclosure. The machine was an Austin "Whippet" and is used by its owner, an officer in the Royal Air Force, for going about the country from one air station to another and also for private flying visits. The machine handles extraordinarily well, and in spite of the fact that it must be four or five years old, does not seem to have deteriorated to any noticeable extent.

* * *

THE Austin "Whippet," which is shown with its owner in the accompanying photograph, was designed by Mr. Kenworthy shortly after the War, and was, it may be recollected, exhibited at the last Olympia Aero Show. Owing to the fact that the Austin Motor Co. closed down its aircraft section only a few of these machines were turned out, and consequently it is of interest to be able to call attention to one of them, not only being in existence today, but actually flying as



THE AUSTIN "WHIPPET": Fitted with a six-cylinder Anzani engine of 45 h.p. this machine has an excellent performance coupled with low landing speed. It is used by an Air Force Officer as a run-about, and has been in service for some four or five years.

annual subscription of £500 for two years towards running expenses. Furthermore, the Air Ministry will make a grant of £10 for each pilot's certificate issued to a member of a club. On their part the clubs will be required to provide aerodrome accommodation, employ at least one pilot-instructor, and one ground engineer, and generally to put up financial or other contributions at least the equivalent of that offered by the Air Ministry.

* * *

THERE are other provisos, but these in brief are the general conditions upon which the Air Ministry is prepared to assist the formation of light 'plane clubs. The initial grant of £2,000 per club, towards the purchase of machines, does not appear likely to be made until the engine question has been settled, as somewhat naturally the Air Ministry will want to be sure that the machines to be purchased partly with the taxpayers' money are fitted with suitable power plants. As far as can be seen, however, the engine controversy is far from being settled, and a somewhat interesting situation has therefore arisen. However, the sooner the general plans are discussed as between the Air Ministry and the clubs, the sooner may we expect a definite policy to be evolved.

strongly as ever. It may be argued that the machine is not a light 'plane, but then, as its owner very pertinently asked at the Buchanan lecture at the Royal Aeronautical Society recently, when is a light 'plane not a light 'plane? It is true that the Anzani engine has considerably more than the 1,100 c.c. capacity permitted at Lympne, but at any rate the "Whippet" is a low-power machine, and until the light 'plane class has been officially defined may be regarded as such.

* * *

THE particular Austin "Whippet" illustrated in our photograph landed on the testing track of the Austin works at noon, recently, having left Northolt at 10 a.m., and having made a call at Coventry for petrol on the way. The "Whippet" has a span of 21 ft. 6 ins. only, and can almost, as its owner puts it, pass through a hole in a hedge. As the wings fold the machine takes up very little space in a hangar, and the landing speed of 35 m.p.h. is sufficiently low to enable the machine to be landed almost anywhere. With its standard tanks the machine has a range of approximately 180 miles. It might be added that the machine has flown several thousand miles, and has paid flying visits to the Continent several times.

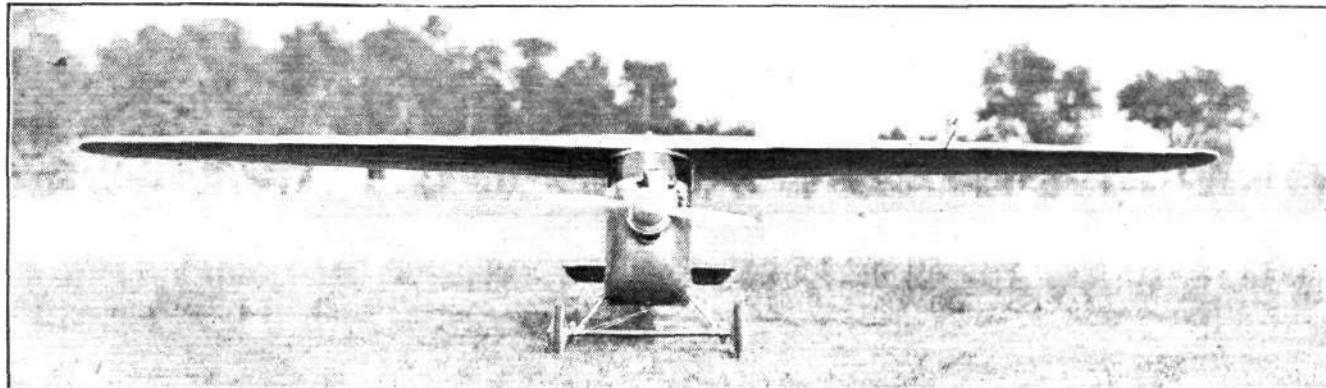
THE DRIGGS-JOHNSON LIGHT MONOPLANE

Four-Cylinder Henderson Engine

WE have previously recorded in our Light 'Plane and Glider Notes the fact that at the Dayton meeting the Driggs-Johnson light monoplane secured first place in the *Dayton Daily News* race on October 3, and also, that the same machine was second

Company, of Dayton, Ohio. The only part not constructed there is the Henderson engine.

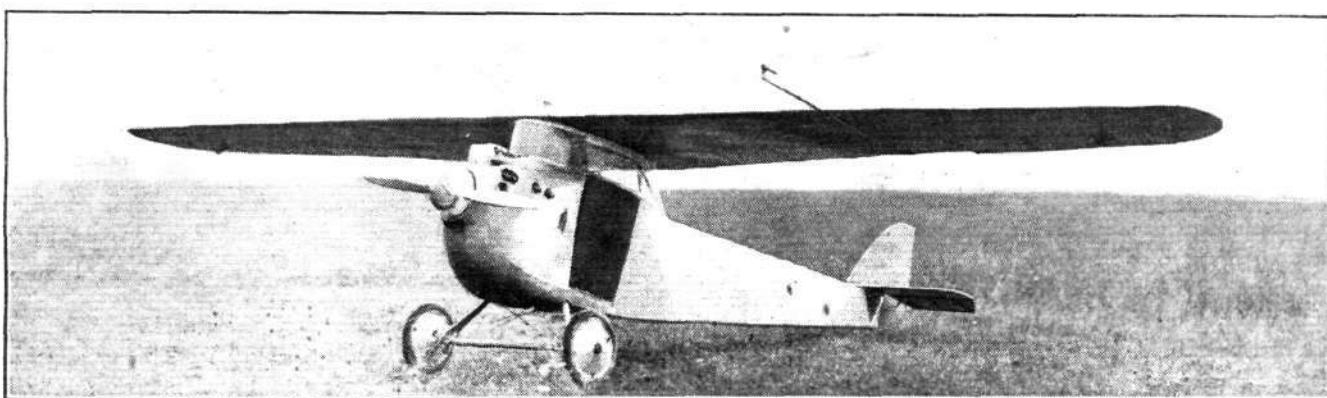
The fuselage, which is of rectangular cross-section in front, merging into a triangular section aft of the cockpit, is built



AN AMERICAN LIGHT 'PLANE : Front view of the Driggs-Johnson monoplane, with four-cylinder Henderson air-cooled engine.

in the "Speed and Efficiency" race, and in the cross-country race for the Rickenbacker trophy. We have now received from the manufacturers of this interesting little machine the accompanying photographs and particulars.

up of welded steel tube, braced by Roebling wire. It may be recalled that a week or two ago we referred to this form of construction in connection with bringing down the cost of light 'planes, and it is thus interesting to have a practical

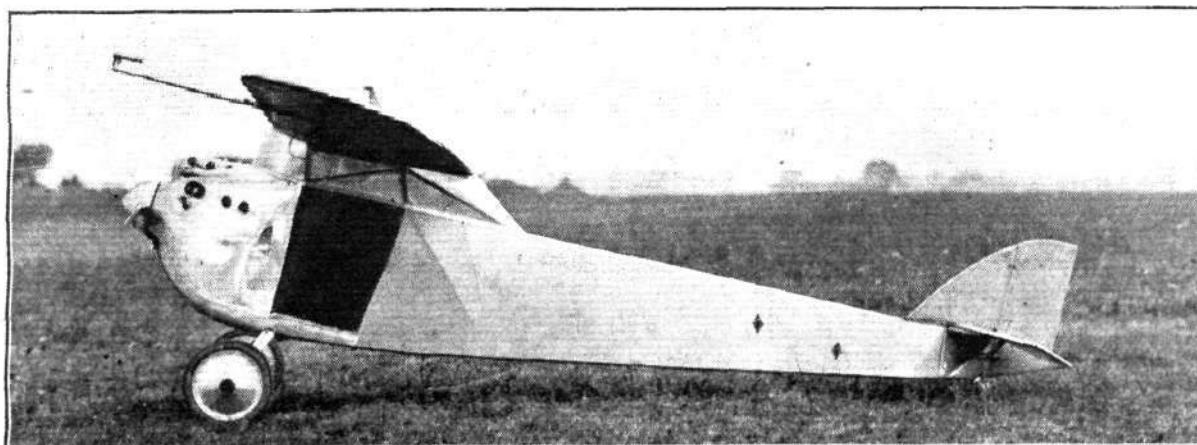


THREE-QUARTER FRONT VIEW OF THE DRIGGS-JOHNSON LIGHT MONOPLANE : Note the celluloid window surrounding the cockpit. The engine is supplied with air for cooling through the scoop under the airscrew, and through louvres in the sides of the cowling. Entrance to the cockpit is by the door on the port side.

The designer of the Driggs-Johnson "D.J.-1" is Mr. Ivan H. Driggs, an engineer of considerable experience, as he was formerly assistant chief engineer to the Dayton-Wright Co., under Col. V. E. Clark. All the constructional work was carried out in the shops of the Johnson Airplane and Supply

example of this form of fuselage construction, familiar from the Fokker machines, applied to an actual light 'plane with apparently satisfactory results.

An unusual feature of the Driggs-Johnson monoplane is the totally-enclosed "cabin" for the pilot. The wing, it will be



THE DRIGGS-JOHNSON LIGHT MONOPLANE : Side view. The wing is covered with ply-wood up to the rear spar.

seen, is mounted high above the fuselage, "parasol" fashion, and the space between the lower surface of the wing and the deck of the fuselage is covered with celluloid sheet passing all round the cabane struts supporting the wing. Access to the cockpit is by a door on the port side. The object of this unorthodox arrangement is obviously to give the pilot a good view, while at the same time avoiding the extra resistance that would be caused by leaving the pilot's head and shoulders exposed. Further to improve the view, and also the lighting of the "cabin," a celluloid window covers an opening in the wing and forms a sort of skylight through which the pilot can look upwards. It is, perhaps, a debatable point whether the majority of pilots would care to be so enclosed, but the arrangement does give a very good view, and is probably quite efficient aerodynamically.

The monoplane wing is of the pure cantilever type, with spars of laminated spruce. The spars are not spindled-out, but are decreased in width from root to tip by leaving off successive laminations. The ribs have webs of $\frac{1}{16}$ -inch Spanish cedar three-ply, and divided flanges $\frac{3}{16}$ by $\frac{1}{16}$ inch nailed and glued to each side of the rib. In order to stiffen the wing against torsion the covering is $\frac{1}{16}$ -inch birch up to the rear spar, the trailing edge being covered with fabric. The wing section used is U.S.A. 45, and the wing is tapered in chord and thickness. The aspect ratio is high (9.8). The ailerons are of welded steel tube construction and are fabric covered. The tail surfaces also are of welded steel tube construction, and are externally braced.

The undercarriage is of simple type, with a single stream-line strut on each side, wire-braced fore and aft and laterally. The wheels are Palmers, 450 by 60 mm.

The power plant, as already mentioned, is a four-cylinder Henderson air-cooled. It is a standard engine in all respects except for the removal of the regular flywheel and housing, which have been supplanted by thrust bearings and a propeller hub. The air enters the cowling through a scoop in front, under the propeller-shaft, and is forced up the left side of the engine to the exhaust and inlet valve cages. The air is then drawn across the engine from left to right by louvres in the starboard side. An air scoop is also provided at the front of cylinder No. 1 to aid in the circulation. In the same manner a small louvre throws air on to the top of each cylinder. The petrol tank is mounted in the leading edge of the wing, the filler cap being visible in the photographs. An excellent head of petrol for direct gravity feed is thus provided.

It might be mentioned that the Henderson engine is of 80 cub. in. (1,320 c.c.) capacity, or considerably more than that allowed for this year's Lympne two-seater competitions. No actual performance figures of the "D.J. 1" are available, but the top speed is believed to be about 85 m.p.h. Following are the main data: Wing span, 27 ft.; mean chord, 33 ins.; wing area, 70 sq. ft. Weight of machine empty, 326 lbs.; total loaded weight, 511 lbs.; wing loading, 7.3 lbs./sq. ft. The wing weighs 82 lbs., the fuselage 50 lbs., the landing gear 26 lbs., and the power plant, including tanks and piping, 141 lbs. The total structure weight is 168 lbs.



THE "HOLLAND" LIGHT PLANES

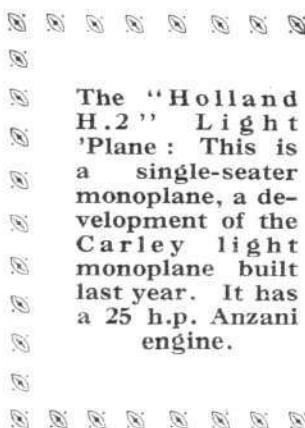
SOME of our readers will, no doubt, remember our description—which appeared in FLIGHT for November 29, 1923—of the Carley Light Monoplane, produced by a Dutch Limited Company, at s'-Gravenhage, the principals of which were Mr. J. D. Carley and Mh. H.v.d. Kwast. Since our last description further developments have taken place, and the company, now known as Vliegtuig-Industrie "Holland," has produced two new types.

One of these, the "Holland H-2," is a monoplane on similar lines to that referred to above, from which, as may be seen from one of the accompanying illustration, it differs as regards general appearance only in minor details—mainly in the undercarriage. The engine fitted in this machine is, as before, a 3-cyl. 25 h.p. Anzani (air-cooled).

The second machine, the "Holland H-1," is a biplane of more or less distinctive design, and being, perhaps, the more

short while back in "Light 'Plane Notes." It has been designed for use either as a school machine or as an economic touring two-seater "Sport 'plane."

The H-1 is a two-seater tractor biplane, having moderately thick-section wings. The top plane, which is straight (*i.e.*, without dihedral), is of shorter span than the lower plane, which is, however, set at a dihedral angle. Both planes are of equal chord, and are not staggered. Narrow ailerons, 5 ft. 3 ins. in span, are mounted on the lower plane only. The wings are built up on two main box spars of spruce and plywood, and the leading and trailing edges are reinforced with plywood. The top 'plane is in two sections, joined in the centre and attached to a cabane of two inverted V-streamline steel tubes, mounted on the top of the fuselage. The lower plane is also in two section, each being attached directly to the lower longerons of the fuselage. Upper and lower planes



interesting of the two, we propose confining our remarks to a brief description of this machine. Before doing so, however, we will give the principal characteristics of the monoplane H-2, which are as follows:—span, 25 ft. 3 ins.; O.A. length, 15 ft. 10 ins.; wing area, 109.75 sq. ft.; weight empty, 374.8 lbs.; weight laden, 650.5 lbs.; weight per h.p., 26.4 lbs.; weight per sq. ft., 5.8 lbs.; speed range, 25-74 m.p.h.

The biplane constitutes a type which may be classified as being just between the true light 'plane (or "motor gliders," as some still insist on calling them), fitted with a motor-cycle type of engine, and the low-powered small aeroplane. It is, in other words, similar in general construction and design to the light 'plane of today, but instead of being fitted with the usual high-speed low-powered motor-cycle type engine, it has a 35 h.p. 3-cyl. Anzani aviation engine—as we suggested a

are connected on either side of the fuselage by a single pair of N interplane struts of streamline steel tube, and by two sloping struts running from the fuselage, at the lower plane attachments, up to the upper ends of the N struts. The N struts, it will be noticed, are inclined inwards from lower to top planes. The rear portion of the top plane immediately above the fuselage is cut away in order to allow of a clear view upwards from the rear cockpit.

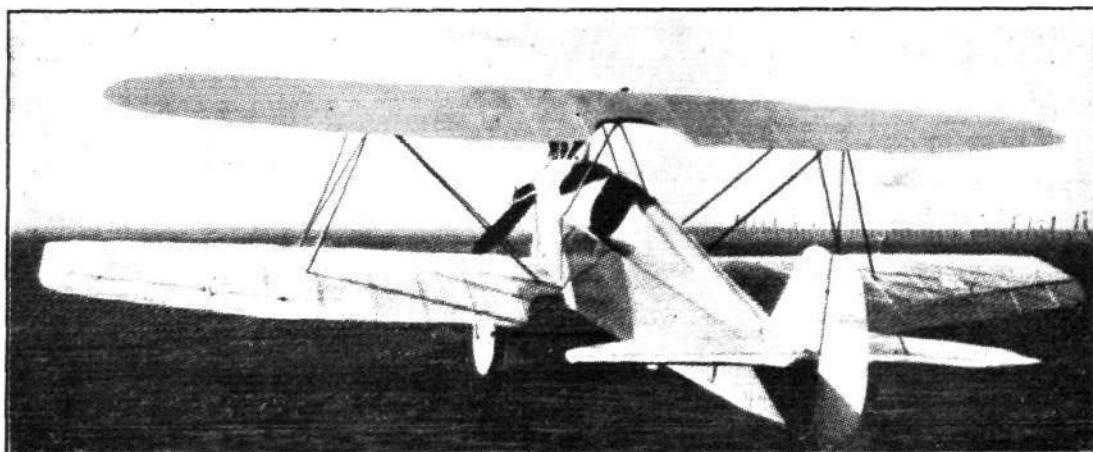
The tail surfaces comprise a comparatively small horizontal stabilising surface, adjustable during flight, to which are hinged unbalanced elevators, and a fixed vertical triangular fin to which is hinged the unbalanced rudder. The horizontal and vertical stabilising surfaces are unbraced, and the latter is built integral with the fuselage. The fuselage is of rectangular section, tapering to a vertical knife-edge at the rear. It is covered with plywood except for the forward

portion, from the engine to the pilot's cockpit, which is covered with duralumin. The top of the fuselage is built up to form a deep continuous fairing for the head of the

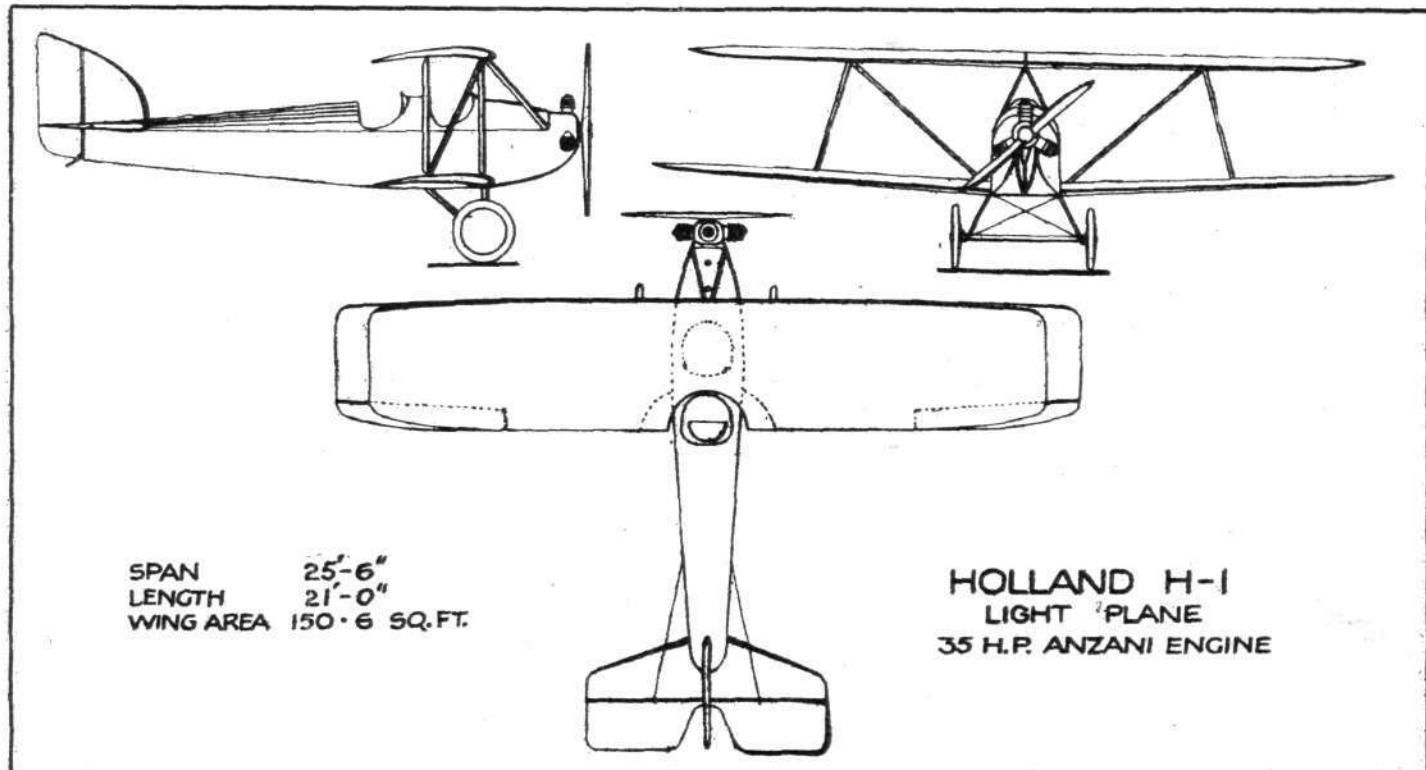
occupant in the rear cockpit. It follows the contour of the head and shoulders more or less from cockpit to tail, and like the covering of this portion of the fuselage is constructed



The "Holland H.1" biplane : This is a two-seater machine which may be described as a light 'plane "just growing up." It is fitted with a 30-35 h.p. Anzani engine.



The "Holland H.1" biplane :
Three-quarter rear view.



The "Holland H.1" biplane : General arrangement drawings.

of plywood. The total length of the fuselage is 19 ft. and the maximum width at the pilot's cockpit is 2 ft. 4 ins. Dual control is fitted, each cockpit being provided with the necessary "gadgets." The front cockpit is fairly well forward, while the rear cockpit is immediately beneath the rear portion of the top plane.

The engine is a three-cylinder radial air-cooled Anzani, developing 30-35 h.p., driving direct a 6-ft. diameter tractor screw. Only the heads of the cylinders project through the cowling. The fuel tanks are located within the fuselage, at the rear of the engine, giving a normal range of action of three hours. The petrol tank has a capacity of 8.3 gals., and the oil tank a capacity of 2 gals.—the latter being on the large size in order to allow an extra or larger petrol tank being fitted should it be required to increase the range of the machine.



PERSONALS



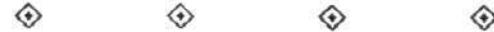
Married

HERBERT JAMES COCKMAN, D.F.C., Malayan Civil Service, son of Mr. and Mrs. G. H. Cockman, was married on November 5, at St. Andrew's Cathedral, Singapore, to MARY CAMPBELL, only daughter of Mr. H. C. RUTTER, J.P., and Mrs. RUTTER, Hazelwood, Morden.

Sqdn.-Leader PERCY C. SHERREN, M.C., R.A.F., second son of Mr. and Mrs. W. D. Sherren, of Crapaud, Prince Edward Isle, Canada, was married on October 29, at St. Mark's, North Audley Street, W., to JOYCE, third daughter of Mr. and Mrs. R. TILDEN SMITH, of 13, Upper Brook Street, W.

To be Married

The marriage will take place on Thursday, November 13, at All Souls', Langham Place, of Flying Officer HORATIO SLEIGH, 216 Squadron, R.A.F., Heliopolis, Cairo, son of the late Mr. Thomas Harper Sleigh and Mrs. Sleigh, of Bury, Lancs, with DOROTHY, widow of Dr. J. G. OGLE, of Mount



The New Under-Secretary of State for Air

JUST as this week's issue of FLIGHT is about to go to press it is announced that Mr. Baldwin has appointed Sir Philip Sassoon to the post of Under-Secretary of State for Air. The appointment has come as somewhat of a surprise, as it had been generally expected that the Duke of Sutherland, who held the post under the previous Baldwin Government, would be chosen again. The absence of His Grace from the list of new ministers will be regretted by many, as he had shown a very thorough grasp of aviation matters during his previous term of office. On the other hand, there is no reason to doubt that in Sir Philip Sassoon we shall have an Under-Secretary of State for Air eminently suitable in every way. Sir Philip, it will be recollected, has been M.P. for Hythe since 1912. Formerly a Major in the Royal East Kent Yeomanry, he became Parliamentary Private Secretary to the Ministry of Transport in 1919, and later Parliamentary Secretary to Mr. Lloyd George.

Armistice Day Honour for "A.A.C."

ON Armistice Day, November 11, members of the Anti-Aircraft Corps of the R.N.V.R. who served during the war, were notified by the Admiralty that they were entitled to wear a war medal.

Famous French Ace Killed

A REGRETTABLE double fatality occurred at Bizerta on Armistice Day, November 11, on the occasion of the unveiling of the monument to Garros. Capt. Madon, the famous French Ace, was flying over the monument during the ceremony, when he suddenly crashed to earth. On striking the ground the machine fell on a spectator, Dr. Aragon, who, together with the pilot, was killed. Capt. Madon, during the war, brought down (officially) 41 German machines—actually, however, he accounted for very many more.

A French Speed Record

ON November 8, Adjutant Bonnet, of the French Army Air Service, created a new French speed record at Istres

A conventional V-type landing gear is fitted, consisting of two V's of streamline steel tube carrying, by means of the usual Sandow shock-absorbers, a tubular axle and two wheels, 1 ft. 8 ins. diameter. The wheel track is 4 ft. 3 ins.

The main characteristics of the Holland H.1 biplane are:—

Span (top)	24 ft. 6 ins.
Span (bottom)	25 ft. 6 ins.
Chord	4 ft. 5 ins.
Overall length	21 ft.
Area of main planes	150.6 sq. ft.
Weight, empty	484 lb.
Weight, laden	869 lbs.
Useful load (including fuel)	385 lbs.
Weight per sq. ft.	5.74 lbs.
Weight per horse-power	24.2 lbs.
Speed range	22-71 m.p.h.



Cottage, Redhill, and daughter of Mrs. William Hunter, of Polewood, Cranbrook, Kent.

Killed

Flying Officer JOHN HAYWARD GODFREY FRANKLIN, R.A.F., who was killed on October 11 in an aeroplane accident at Shaibah, Iraq, was the second son of Mr. and Mrs. R. F. Franklin, late of H.M. Dockyard, Devonport. He was 20 years of age.

Deaths

LIEUT. REGINALD J. P. GREBBY, D.F.C., died of pneumonia on November 4, at Geneva, aged 29 years.

Flight-Cadet JOHN EDWARD (JACK) HENRY, R.A.F. Cadet College, Cranwell, who died from meningitis on October 15, at the R.A.F. Central Officers' Hospital, Finchley, was the younger son of Maj. and Mrs. W. T. Henry, of 63, Warriington Crescent, W. His age was 20.

MAJ. GILBERT B. REDGRAVE, late R.A.F., who died at Abinger on October 23, aged 40, was the younger son of Gilbert R. Redgrave.



aerodrome, when he attained a speed of 389.890 km.p.h. (241 m.p.h.), on a Ferbois-Bernard monoplane (450 h.p. Hispano-Suiza, with Lamblin radiators), thus beating the previous record of 375 km.p.h. (232.5 m.p.h.) made by Sadi Lecointe.

British Flying Boat Crew Rescued

WHILST on her way to China on November 5, H.M.S. Weymouth picked up the crew of a wrecked flying boat (4094), 15 miles south of St. Catherine's Point, I.O.W. The crew consisted of three officers and two ratings, from Calshot, and they were landed at Portland Harbour uninjured.

Irish Free State and the International Air Convention

THE position of the Irish Free State as regards the International Air Convention has been defined as follows:—

The Irish Free State is to be considered, since the coming into force of its constitution on December 6, 1922, by virtue of a Proclamation of His Britannic Majesty, as one of the British Dominions mentioned in Article 40 of the Convention for the Regulation of Aerial Navigation dated October 13, 1919.

This Convention and the additional Protocol of May 1, 1920, having been signed and ratified on behalf of the British Empire before that date of December 6, 1922, are in force for the Irish Free State.

The Protocol of October 27, 1922, concerning an amendment to Article 5, is also valid as regards the Irish Free State.

The Protocol dated June 30, 1923, relating to an amendment to Article 34, has been signed by a representative of the Irish Free State, and it is understood that it will be subsequently ratified by His Britannic Majesty on behalf of the British Empire.

The applications for derogations from Article 5 of the Convention made by Belgium, France and Canada have already been accepted on behalf of the British Empire. The application made by Great Britain and Northern Ireland has been accepted by the Irish Free State as well as by the other British Dominions and India.

THE ROYAL AIR FORCE

London Gazette, October 28, 1924

General Duties Branch

Pilot Officer F. E. Watts is promoted to rank of Flying Officer, with effect from Sept. 24, and with sen. of March 24. Flying Officer C. D. Robertson, M.M., is transferred to the Reserve, Class C.; Oct. 29. Flying Officer P. W. Adams relinquishes his short service commission on account of ill-health and is permitted to retain his rank; Oct. 29. Flying Officer A. G. Lawe (Lieut., Lincs. R.), relinquishes his temp. commn. on return to Army duty; Oct. 16.

Stores Branch

Flying Officer F. C. C. B. Hichens is granted a permanent commn. in rank stated; Oct. 29. *Gazette*, July 29, concerning Flight-Lieut. F. Binns, M.B.E., is cancelled. The rank of Flight-Lieut. (acting Sqdn. Leader) F. Binns is as now described, not as *Gazette*, Sept. 26.

Medical Branch
Flying Officer J. G. Russell, M.B., B.A., is promoted to rank of Flight-Lieut.; Oct. 30.

Reserve of Air Force Officers

The following are granted commns. on prob. in Class A, General Duties Branch, in ranks stated; Oct. 28:—Flying Officer: J. G. Goodyear. Pilot Officers: R. Michaelis, J. E. G. Robinson.

The following Flying Officers are transferred from Class A to Class C; Oct. 28:—S. E. Sutcliffe, N. H. Thackrah. Flight-Lieut. A. C. Snow is transferred from Class B to Class C; Aug. 30.

Memoranda

The permission granted to Sec. Lieut. E. L. Stacey to retain his rank is withdrawn, on his enlistment in Territorial Army; June 16.

Erratum.—FLIGHT, August 28, 1924, page 544: In *Gazette* of Aug. 19, 1924, concerning Capt. A. B. F. Alcock, D.S.C., R.M., for July 21, read July 22.

ROYAL AIR FORCE INTELLIGENCE

Appointments.—The following appointments in the Royal Air Force are noted:—

General Duties Branch

Air Commodore A. M. Longmore, D.S.O., to R.A.F. Depot, on transfer to Home Estab.; 16.10.24. To No. 7 Group H.Q., Andover, to command; 26.11.24.

Squadron Leaders: W. V. Strugnell, M.C., to Engine Repair Depot, Egypt; 18.10.24. E. R. Manning, D.S.O., M.C., to No. 4 Flying Training Sch.; Egypt; 20.10.24.

Flight Lieutenant: I. M. Matheson to No. 7 Sqdn., Bircham Newton, on transfer to Home Estab.; 1.11.24.

Flying Officers: J. F. Horsey to R.A.F. Depot on transfer to Home Estab.; 28.9.24. F. H. Astle to No. 3 Group H.Q., Spittlegate; 30.10.24. C. W. A. Scott to Armament and Gunnery Sch., Eastchurch; 1.11.24. G. M. Trundle to Aden Flight, Aden; 11.10.24. I. M. Morris, E. C. Ridlington, L. W. Mercer and F. C. T. Rowe, to No. 14 Sqdn., Palestine; 1.11.24. G. R. C. Spencer to No. 20 Sqdn., India, instead of to Aircraft Park, as previously notified; 12.9.24. B. J. J. Nimm to No. 5 Armoured Car Coy., Iraq; 14.10.24. F. B. Lawrie to No. 30 Sqdn., Iraq; 30.9.24. G. C. Shepherd to No. 84 Sqdn., Iraq, instead of to No. 55 Sqdn., as previously notified; 18.9.24. S. T. B. Cripps, D.F.C., to Armament and Gunnery Sch., Eastchurch; 1.11.24. E. A. Slater to Sch. of Tech. Training (Men), Manston; 3.11.24. (Hon. Flt. Lt.) A. R. Prendergast to No. 24 Sqdn., Kenley; 7.11.24. C. B. Horsfield to No. 19 Sqdn., Duxford; 10.11.24.

Pilot Officers: Y. W. Burnett, J. S. Dick and R. Barrett, to No. 45 Sqdn., Iraq; 30.9.24.

London Gazette, November 4, 1924

General Duties Branch

Flight Lieut. H. Dunboyne O'Neill, A.F.C., is granted permanent commn. in rank stated (Nov. 5); the seny. of Pilot Officer J. C. Hill in that rank is antedated to May 10, 1922; Flight Lieut. F. Leathley, M.C., is placed on half-pay, scale B (Nov. 4); Flying officer (Hon. Flight Lieut.) G. McClintock (Lieut., R.N., retired) resigns his short service commn. (Nov. 5).

Stores Branch

The following Flying Officers are granted permanent commns. in rank stated (Nov. 5):—J. Davison, G. Scarrott, C. N. Scott. The following Flying Officers are granted permanent commns. for accountant duties in rank stated (Nov. 5):—B. L. Biofield, W. E. Fisher, M.C., W. J. Heneghan, L. de L. Leder, A. E. Vautier, M.C.

Medical Branch

G. J. Hanly, M.B., is granted a short service commn. as a Flying Officer, with effect from, and with seny. of, Oct. 23.

Reserve of Air Force Officers

The following are granted commns. on probation in Cl. A, General Duties Branch, in ranks stated (Nov. 4):—Flying Officers.—W. L. Coleridge, R. M. Stirling, A.F.C. Pilot Officer.—P. H. Davies. Flying Officer J. N. Ogilvie is confirmed in rank (Oct. 12).

The following are transferred from Class A to Class C (Nov. 4):—Flying Officer.—W. Anderson. Pilot Officers.—R. J. Ewins, L. J. Tripp. Pilot Officer T. N. Drake is transferred from Class B to Class C (Aug. 19).

Memorandum

Capt. D. C. Granville Sharp, R.A., is granted rank of Maj. R.A.F., on retirement from the Army (Oct. 25).

Stores Branch

Wing Commander: J. Rylands (Accountant), to No. 1 Sch. of Tech. Training (Boys), Halton, for duty as H.Q. Accountant Officer; Nov. 20.

Squadron Leader H. E. J. Hewitt to No. 1 Stores Depot, Kidbrooke; 10.11.24.

Flight Lieutenant E. C. M. Knott (Accountant) to Aircraft Depot, Iraq; 16.10.24.

Medical Branch

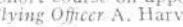
Wing Commander B. A. Playne, D.S.O., M.B., B.A., to H.Q., Iraq, for duty as Medical Officer; 1.10.24.

Flight Lieutenants: P. C. Livingston, D.P.H., D.O.M., and S.B.A., to R.A.F. Depot; 15.11.24. W. G. Weston, M.B., to Inland Area Aircraft Depot, Henlow; 10.10.24. F. W. Squair (Hon. Sqdn. Ldr.), M.B., T.D., and G. M. Mellor, to R.A.F. Depot; 1.11.24. T. P. Harpur to No. 114 Sqdn., Duxford; 24.10.24.

Flight Lieutenant G. Kinneir, to Basrah Group H.Q., Iraq; 8.10.24.

Flying Officers: A. Harvey, M.B., to Research Laboratory and Medical Officers' Sch. of Instruction, Hampstead, for short course on appointment to a Short Service Commission; 7.10.24. C. J. MacQuillan, M.B., B.A., to Aeroplane and Armament Experimental Estab., Martlesham Heath; 13.10.24. F. P. Scholfield, M.B., to No. 5 Flying Training Sch., Sealand; 13.10.24. H. W. Corner, M.B., to R.A.F. Central Hospital, Finchley; 15.11.24. D. Magrath, M.B., to R.A.F. Depot; 23.10.24. G. J. Hanly, M.B., to Research Lab. and Medical Officers' Sch. of Instruction, Hampstead, for short course on appointment to a Short Service Commn.; 23.10.24.

Flying Officer A. Harvey, M.B., to R.A.F. Depot; Nov. 6.



Accountant Officers in Royal Air Force. Results of First Examination

THE Air Ministry announces that the following candidates for permanent commissions in the Accountant Branch of the Royal Air Force have been declared successful as a result of a competition held by the Civil Service Commissioners, subject, in certain cases, to further medical examination:—

McBroom, A. (West Hartlepool), West, A. E. (London), Goodall, G. (Ossett, Yorks), Aston, C. E. (Southampton), Thomas, J. R. (Newcastle-upon-Tyne), Titherington, H. J. (Burnley), George, S. C. (Grimsby), Hill, S. W. (Nottingham), Collinson, R. W. (London), Holmes, K. E. M. (Hornsea, Yorks), Murray, J. MacL. (Southampton), Spicer, L. M. (Norwich), Goatcher, C. F. (London), Lorimer, C. (London), Heasman, L. G. (Thornton Heath), Mallinson, R. (Halifax), Smith, Edward (Winchester).

It is anticipated that a small number of additional appointments to commissions may be made on the results of this competition early in 1925.

Amsterdam-Batavia Flight

THE three " Flying Dutchman," led by M. van der Hoop, who are flying to Batavia, Java, on a Fokker (Rolls-Royce " Eagle IX. "), are making good progress. Having arrived at Angora on November 3, they left again on November 5 for Aleppo, which was reached safely and where they met with a hearty reception from the French authorities there. On the following morning they made a non-stop flight from Aleppo to Baghdad, covering the 550 miles in 7 hrs. They spent the night at Baghdad and expressed their gratitude for the assistance received from the R.A.F. there. Another non-stop flight was made the next day, November 7, from

Baghdad to Bushire. From here they continued their flight at 7 a.m. the following morning, and arrived at Bandar Abbas at 3 p.m., where they spent the night as guests of the R.A.F. They left again early on Sunday morning, November 9, and arrived at Karachi at 5.30 p.m. They left Karachi at 7 a.m. on November 10, and reached Ambala on November 11.

French Aviation Grant Increased

AN increase of 11,500,000 fr. has been approved by the Finance Committee of the Chamber of Deputies for the French Government subsidy to the commercial air service companies. This is not as much as the 15,000,000 fr. asked for by M. Laurient Eynac, Under-Secretary for Air, but it should, if passed by Parliament, enable several of the existing services to be extended and new routes to be opened up.

A New Calthrop Parachute

A NEW type of Calthrop " Guardian Angel " parachute was tested at Croydon Aerodrome recently, when Mlle. Finet jumped from an aeroplane from an altitude of 1,000 ft. The parachute opened in a little under two seconds, and the young Frenchwoman descended safely to earth in 1 min. 4 secs. This parachute, which weighs 14½ lbs., serves as a cushion when not in use. Representatives from several foreign countries, including Russia, were present at the demonstration.

Aeroplane Wing Found in Sea

THE Air Ministry has been notified that the frame of an aeroplane or seaplane wing was picked up on November 9, in the sea, near Dunstanburgh Castle, Northumberland. On it were found the number " F.S. 12389," and the dates July 12 and 26. From the condition of the metal parts it would appear that the wing had not been long in the water.

AIR POST STAMPS

By DOUGLAS B. ARMSTRONG

Passing of Spanish Air Stamps

ONE of the great charms of air post collecting lies in its glorious uncertainty. The vast majority of aero stamps and franks must of necessity be ephemeral in character, so that varieties which are current one day become obsolete the next, with resulting appreciation in value.

Whether the air post develops into a permanent branch of the postal service as in France, Great Britain, etc., or fades away and gradually dies through public apathy, as in Uruguay and the Argentine, the need for distinctive postage stamps eventually disappears, and the aeroemist can write "Finis" to one more section of his album. And so we go on until the dawn of that not distant day when all first-class mail matter will be carried by air, and every air post collector will be a millionaire in embryo.

The Spanish air stamps are the latest to pass into obsolescence, although the special pentagonal postmark for air-borne correspondence is retained. Air postage, however, is now prepaid in ordinary postage stamps, and the series overprint "Correo Aereo" is no more. A Royal Decree of October 17, 1919, authorised the inauguration of a Spanish air post service, in connection with which stamps of a special character were to be provided. These stamps took the form of contemporary 5 c., 11 c., 25 c., 50 c. and 1 peseta postage stamps of Spain uniformly overprinted "Correo Aereo" in condensed Roman capitals. Placed on public sale on April 4, 1920, they were first employed in the service from Barcelona to Malaga, and subsequently on all the Spanish air post lines. A 30 centimos value was prepared for use about the same time, but not issued owing to an alteration in the proposed air mail tariff. Only two sheets of 100 stamps each are known to exist of this essay. All issued values exist imperforate, whilst errors of the 5 c. and 25 c. have been recorded showing the overprint inverted.

A very effective design for a definitive Spanish air stamp was prepared by Don Bartholome Maura, chief engraver to the Royal Mint, Madrid, in the latter part of 1919, which depicts a postal hydroplane approaching a sunlit bay, fringed with palm trees, with a tiny steamer visible on the horizon. The vignette is enclosed in a frame supported by Ionic columns, with the Royal Arms of Castile and Aragon at the top, and the words "CORREO AEREO" in a panel at the foot. It is regretted that these striking aero stamps were not proceeded with.

Proposed Portuguese Air Stamps

FROM time to time there have been rumours of an impending issue of Portuguese air mail stamps, but beyond the Lisbon-Brazil flight commemorative series which was never used for air postage, they have so far failed to materialise. In connection with the forthcoming Lisbon-Madrid service, however, it is proposed to use up a proportion of the large remainder of that ill-starred issue by surcharging with the values 5 and 10 escudos to represent the projected air post fees.

Air Stamps for Finland

WITH the development of the air post service in Scandinavia a number of new aero stamps are foreshadowed. Prominent amongst them is a series for Finland, who is now linked with her neighbours by air. Special cachets inscribed "IMAILU-POST" were applied to letters carried by air between Helsingfors and Reval in 1919-20, and also between Finland and Sweden about the same time, but distinctive stamps have not hitherto been provided. Norway and Sweden may also be expected to put forth aero stamps in the near future.

"ZR.3" Air Mail

THE first letters carried by the German dirigible "ZR.3" to the United States reached London on October 25. Contrary to reports special vignettes were not employed, the only distinguishing features being the official *etiquette* "Mit Luftpost Befordert" and the Friedrichshaven postmark. In consequence of the large number of letters received for transmission the air mail had to be closed earlier than was anticipated, and fully one-third of the correspondence was left behind to be forwarded by ordinary routes. Air post collectors who got their letters through by the "ZR.3" mail may therefore congratulate themselves upon their good fortune.

Readers are invited to forward to the Editor of FLIGHT letters, etc., bearing aerial stamps or postmarks for mention in this column, as well as out-of-the-way varieties, etc.

We shall also be pleased to hear from correspondents interested in air-stamp collecting, and to answer any queries.

PUBLICATIONS RECEIVED

Aircraft of the World. By Major F. A. de V. Robertson. London: Humphrey Milford. Price 7s. 6d. net.

Revue Juridique Internationale de la Locomotion Aérienne. October, 1924. Edition Aérienne. 4, Rue Tronchet, Paris.

Aeronautical Research Committee, Reports and Memoranda: No. 917 (Ac. 143).—The Frequency of the Eddies Generated by the Motion of Circular Cylinders through a Fluid. By E. F. Relf and L. F. G. Simmons. June, 1924. London: H.M. Stationery Office, Kingsway, W.C. Price 3d. net.

A.J.S. Wireless Receivers: Instructions and Information. 2nd Edition. A. J. Stevens and Co. (1914), Ltd., Walsall Street Branch, Wolverhampton. Price 6d.

The King's Regulations and Air Council Instructions for the Royal Air Force, 1924. Vol. I, *Regulations*. Vol. II, *Appendices and Index*. London: H.M. Stationery Office, Kingsway, W.C.2. Price: Vol. I, 4s. net; Vol. II, 2s. net.

Technical Notes of the U.S. National Advisory Committee for Aeronautics: No. 201.—Micarta Propellers—IV: Technical Methods of Design. By F. W. Caldwell and N. S. Clay, September, 1924. No. 202.—Investigation of Effect of Oscillating Airstream on Characteristics of Airfoils. By Toussaint, Kerneis and Girault, September, 1924. No. 203.—Short Method of Calculating Torsional Stresses in an Airplane Fuselage. By J. E. Younger, September, 1924. No. 204.—Study of Static Stability of Airships. By F. Rizzo, September, 1924. U.S. National Advisory Committee for Aeronautics, Washington, D.C., U.S.A.



AERONAUTICAL PATENT SPECIFICATIONS

Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged etc.

APPLIED FOR IN 1923.

Published November 13, 1924.

18,174. E. OEHMICHEN. Controlling and stabilising device for helicopters. (201,896.)
 18,314. F. H. PAGE and HANDLEY PAGE, LTD. Aeroplane control. (223,292.)
 18,361. W. H. KELLY. Aerial propellers. (223,296.)
 20,355. DORNIER-METALLEBAUTEN GES. and C. DORNIER. Metal girders. (223,348.)
 30,798. J. A. DOMENJOZ and L. GARNIER. Machines for aerial navigation. (208,157.)
 31,606. BLACKBURN AEROPLANE AND MOTOR CO., LTD., and J. D. RENNIE. Flying-boat hulls. (223,437.)

APPLIED FOR IN 1924.

Published November 13, 1924.

8,971. C. S. COOKSON. Screw propellers. (223,501.)

If you require anything pertaining to aviation, study "FLIGHT'S" Buyers' Guide and Trade Directory, which appears in our advertisement pages each week.

NOTICE TO ADVERTISERS

All Advertisement Copy and Blocks must be delivered at the Offices of "FLIGHT," 36, Great Queen Street, Kingsway, W.C.2, not later than 12 o'clock on Saturday in each week for the following week's issue.

FLIGHT

The Aircraft Engineer and Airships

36, GREAT QUEEN STREET, KINGSWAY, W.C.2.
 Telegraphic address: Truditur, Westcent, London.
 Telephone: Gerrard 1828.

SUBSCRIPTION RATES

"FLIGHT" will be forwarded, post free, at the following rates:—

UNITED KINGDOM	ABROAD*	s.	d.	s.	d.
3 Months, Post Free..	3 Months, Post Free..	7	7	8	3
6	6	15	2	6	6
12	12	30	4	12	3

These rates are subject to any alteration found necessary under abnormal conditions and to increases in postage rates.

* European subscriptions must be remitted in British currency.

Cheques and Post Office Orders should be made payable to the Proprietors of "FLIGHT," 36, Great Queen Street, Kingsway, W.C.2, and crossed London County and Westminster Bank, otherwise no responsibility will be accepted.

Should any difficulty be experienced in procuring "FLIGHT" from local newsvendors, intending readers can obtain each issue direct from the Publishing Office, by forwarding remittance as above.